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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
10 031,766	01 23 2002	Roland Treutlein	WET 0106 PUS	8455
75	90 07 31 2002			
Robert P Renke Artz & Artz 28333 Telegraph Road Suite 250			FXAMINER	
			NGUYEN, CHAU N	
Southfield, MI			ART UNIT	PAPER NUMBER
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DATE MAILED: 07-31-2002

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)
~		TREUTLEIN ET AL.
Office Action Summary	10/031,766	
omoc Action Cummary	Examiner	Art Unit
The MAILING DATE of this communication	Chau N Nguyen	2831
Period for Reply	, uppoure on the core.	
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days If NO period for reply is specified above, the maximum statutory provided for reply within the set or extended period for reply will, by set any reply received by the Office later than three months after the rearned patent term adjustment See 37 CFR 1 704(b) Status	DN. FR 1 136(a). In no event, however, may a n a reply within the statutory minimum of thi eriod will apply and will expire SIX (6) MOI statute, cause the application to become A	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U S C. § 133)
1) Responsive to communication(s) filed on	·	
2a) ☐ This action is FINAL . 2b) ☑	This action is non-final.	
3) Since this application is in condition for al closed in accordance with the practice un		
Disposition of Claims 4) Claim(s) 25-45 is/are pending in the applie	cation	
4a) Of the above claim(s) is/are with		
5) Claim(s) is/are allowed.	iarawii ii oiii oonolooralion.	
6)∑ Claim(s) <u>25-45</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction a	nd/or election requirement.	
Application Papers	4	
9) The specification is objected to by the Exar	miner.	
10) The drawing(s) filed on is/are: a) a	accepted or b) objected to by	the Examiner.
Applicant may not request that any objection	to the drawing(s) be held in abey	ance. See 37 CFR 1.85(a).
11) The proposed drawing correction filed on _	is: a) approved b) d	disapproved by the Examiner.
If approved, corrected drawings are required	in reply to this Office action.	
12) The oath or declaration is objected to by the	e Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for for	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).
a)⊠ All b) Some * c) None of:		
1. Certified copies of the priority document	nents have been received.	
2. Certified copies of the priority docum	nents have been received in A	Application No
 3. Copies of the certified copies of the application from the Internationa * See the attached detailed Office action for a 	ll Bureau (PCT Rule 17.2(a)).	
14) ☐ Acknowledgment is made of a claim for dom	nestic priority under 35 U.S.C.	§ 119(e) (to a provisional application).
a) The translation of the foreign language 15) Acknowledgment is made of a claim for don	· ·	
Attachment(s)	· •	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948 3) Notice of Draftsperson's Patent Drawing Review (PTO-948	3) 5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)
D. D. C.		

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DETAILED ACTION

Claim Objections

1. Claims 25, 30, 34, and 39 are objected to because of the following informalities:

in claim 25, line 5, delete "individual".

in claim 30, line 2, change "the individual" to --each--,

in claim 30, line 3, change "films" to --film--,

in claim 34, line 8, change "and/or" to either --and-- or --or--,

in claim 39, line 2, change "the individual" to --each--,

in claim 39, line 3, change "films" to --film--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 25-28, 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Escallier et al. (4,548,661).

Escallier et al. discloses a halogen-free composite film comprising at least one to N sealable, multi-layered laminated film, wherein N is an integer from 2 to 10, and in which a functional element is interposed between the laminated films. Escallier et al. also discloses the function element being a metallic conductor (re claim 26), each laminated film comprising a first film, a laminating adhesive, and a second film (re claim 27), each laminated film being identical to one another (re claim 28), the laminating adhesive being acrylates (re claim 31), and the first and second films of each laminated film each having a thickness between 10 μ m and 100 μ m (re claim 35).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the

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subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 29, 30, 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Escallier et al. in view of Hake et al. (5,861,578).

Escallier et al. discloses the invention as claimed except for the second film of each laminated film comprising a thermally activated substance which can be polyesters (re claims 29, 32 and 34), and the adhesive being polyurethanes. Hake et al. discloses a cable comprising a laminated structure (16,18,20), wherein the second layer (16) of the laminate comprising polyester and the middle layer of the laminate comprising polyurethane (col. 3, lines 63-67). It would have been obvious to one skilled in the art to use polyesters for the second film and polyurethanes for the adhesive layer of each laminated film of Escallier et al. since these material are known in the art for being used to cover metallic conductor as taught by Hake et al.

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It would also have been obvious to one skilled in the art to use polyamide films for the first and second films of each laminated film of Escallier et al. since polyamide film is known in the art for being used to cover metallic conductors as taught by Hake et al. (re claim 30).

7. Claims 33, 36, 37, 40, 41, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Escallier et al. in view of Hols (6,071,551).

Escallier et al. discloses the invention as claimed including claims 37, 40, 43 and 44. Escallier et al. does not disclose the wet application weight of the laminating adhesive being 2 g/m² to 40 g/m² (re claims 33 and 41). Hols discloses an invention relating to a laminate structure, wherein a mixture was applied to a base layer in a wet application weight of 5 g/m². It would have been obvious to one skilled in the art to apply the teaching of Hols in the each laminated film of Escallier et al. to increase the moisture resistance of the laminated film.

Re claim 36, Escallier et al. discloses an inherent method of making the composite film, comprising applying an adhesive to a first film (26) of a first laminated film, joining the second film (30) to the adhesive to form the first laminated film, curing the laminating adhesive of the first laminated film, providing a function element between the first film and a second laminated film

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produced in the same way as the first laminated film. Escallier et al. does not disclose drying the first film in a drying tunnel at temperatures from about 80 degrees C to 180 degrees C. Hols discloses that the adhesive layer was applied to the base layer and then the layer was subjected to a heating temperature of 80 degrees C to dry the adhesive (col. 4, lines 60-63). It would have been obvious to one skilled in the art to dry the adhesive of Escallier et al. at a temperature of 80 degrees C before applying the second film to cure the adhesive as taught by Hols.

Re claim 45, the modified Escallier et al. cable does not disclose a vacuum deposited copper as the functional element. However, it would have been obvious to one skilled in the art to use a vacuum deposited copper layer as the function element in the cable of Escallier et al. since a cable comprising a vacuum deposited copper layer as the function element is known in the art.

8. Claims 38, 39 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Escallier et al. in view of Hols as applied to claim 36 above, and further in view of Hake et al.

Hake et al. discloses a cable comprising a laminated structure (16,18,20).

Hake et al. discloses that polyurethane (col. 3, lines 63-67) is known in the art for being used to cover metallic conductor. It would have been obvious to one skilled

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in the art to coat the second film of Escallier et al. with polyurethanes since polyurethane is known in the art for being used to cover metallic conductor as taught by Hake et al. (re claim 38 and 42).

It would also have been obvious to one skilled in the art to use polyamide films for the first and second films of each laminated film of Escallier et al. since polyamide film is known in the art for being used to cover metallic conductors as taught by Hake et al. (re claim 39).

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Chau N Nguyen Primary Examiner

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CN July 27, 2002